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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/815,400

03/31/2004

Benjamin N. Eldridge

P71C2-US

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04/11/2008

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EXAMINER

KARLSEN, ERNEST F

ART UNIT

PAPER NUMBER

2829

NOTIFICATION DATE

DELIVERY MODE

04/11/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/815,400	<b>Applicant(s)</b> ELDRIDGE ET AL.	
	<b>Examiner</b> Ernest F. Karlsen	<b>Art Unit</b> 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on the RCE filed 31 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 47-49,53-55,60-63,67 and 70-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-49,53-55,60-63,67 and 70-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>013108</u> .  | 6) <input type="checkbox"/> Other: _____                          |

Claims 47-49, 53-55, 60-63, 67 and 70-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what the structural result would be for the semiconductor die that is tested by any of the claims. No structural features are disclosed in the specification and no structural features are presented by the claims. What structural effects would result from the process steps of claims 60-63, 67 and 70-72 is not clear. How such would lead to a functional change is not clear. The limitations of claims 47-49 and 53-55 seem to be yet further away from having any influence on a functional change. What influence does the material composition of the blade have on the structure produced. No description of what the structure would look like for any of the claims is presented in the disclosure. The use of the word "sharpened" is questioned. If one sharpens an axe one would normally use a grind stone. Is a grind stone used to form the "blade" used to form the present product? It is still not clear what the structural result would be for the semiconductor die that is tested by the process of any of the claims. Any structural result appears to be akin to placement of an identifying mark which appears to be a kind of printing. Thus what Applicants are claiming is an old device with some kind of printing thereon. Again no illustration of the structure is present in the specification or drawings so it is not clear what the product would be. It is not clear what is meant by "cutting edge" and "slice mark".

Claims 47-49, 53-55, 60-63, 67 and 70-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s)

contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not clear what is meant by “cutting edge” or “slice mark”. The quoted terms do not appear in the original disclosure and are considered new matter.

Claims 47-49, 53-55, 60-63, 67 and 70-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear how Applicants' blade can “slice”, “slice cleanly”, “cut” or “cut cleanly”. Such terms appear in the abstract and pages 5, 10 and 11 of the specification. Aluminum oxide is a ceramic material and has a crystalline structure. Most everyone has seen motion pictures or videos of a very nervous diamond technician cleaving a large diamond. It doesn't slice, it breaks, and the technician has to be very careful to strike it in a manner to make it break in a desired manner. A brick of aluminum oxide is not be nearly as hard as a diamond but the Examiner is not aware that a brick of aluminum oxide can be sliced or cut with a knife. A knife could no doubt be used to saw through an aluminum oxide layer because a real world knife edge is rough. Such sawing would leave a pile of aluminum oxide dust and presumably the cut or slice could not be considered “cleanly”. Any cut through a sheet of aluminum oxide will leave dust or chunks. Some non-crystalline materials such as plastic or butter seem to slice reasonably cleanly. It is not clear from Applicants' disclosure how aluminum

oxide can be "sliced cleanly" or "cut cleanly". Applicants' make argument, in previous responses to office actions that, in effect, say that "sliced" means "sliced cleanly" and not "break", "smash", "split", "divided into parts violently" or "reduce to pieces or fragments". Given such meaning to "sliced" it is not clear from Applicants' disclosure how "sliced" can be accomplished without "break", "smash", "split", divided into parts violently' or "reduce to pieces or fragments".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 47-49, 53-55, 60-63, 67 and 70-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Kennedy. Kennedy shows, in Figure 6, a chip 13 with pads contacted by a probe in the form of a blade 71, see column 7, lines 63-67. The blade 71 inherently has a "cutting edge" along the part of the blade 71 that contacts the pad. Because the blade 71 is at the end of a cantilever arm 37a it will inherently deflect across the terminal. The blade 71 as shown in Figures 5-8 of Kennedy will inherently deflect in a motion that is approximately parallel to the length of the blade which is within plus or minus 45 degrees. The "cutting edge" of the blade inherently has to penetrate the surface to make contact.

Applicants have argued in their response of January 31, 2008 that the blade of Kennedy has only vertical motion with no lateral motion. The free end of a cantilevered beam will always move in an arc when deflected. Thus the blade of Kennedy will inherently deflect across the terminals when the free end of the cantilevered beam of Kennedy moves relative to the end that does not move. The deflection will be parallel to the axis and thus within all angular ranges claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest F. Karlsen whose telephone number is 571-272-1961. The examiner can normally be reached on 8 hrs. Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/815,400  
Art Unit: 2829

Page 6

/Ernest F. Karlsen/  
Primary Examiner, Art Unit 2829